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EVALUATING THE EFFECTS OF DIALECT ON KINDERGARTNERS' USE OF THREE
GRAMMATICAL STRUCTURES IN NARRATIVES

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Masters of Arts

in

The Department of Communication Sciences and Disorders

by
Andromeda P. Love
B.A., Louisiana State University, 2010
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ABSTRACT

The aim of this study was to determine if dialect status has an effect on the frequency at which kindergarteners produce nonmainstream English markings for regular third person, *IS* and *ARE*, and regular past tense when producing oral narratives. Specifically, I wished to determine if child speakers of African American English (AAE) and child speakers of Southern White English (SWE) mark these structures with nonmainstream English forms at different rates. The narrative data came from language samples that had been previously collected from twenty kindergarten speakers of AAE and twenty kindergarten speakers of SWE. All of the children were recruited from various primary schools in rural Louisiana, and their dialect status was confirmed with a listener judgment task. The narratives were elicited by asking the children to produce narratives based on three to four pictures. Their narratives were then transcribed and coded. Once the narratives were transcribed, the target grammar structures were coded as mainstream overt, nonmainstream overt, or nonmainstream zero. The rate of nonmainstream marking was calculated by dividing each child's number of nonmainstream overt and nonmainstream zero markings by the total number of opportunities that each child had to produce the structures.

For all three grammar structures, the AAE-speaking children producing higher rates of nonmainstream marking than their SWE-speaking peers. Additionally, it was found that both groups were more likely to produce nonmainstream forms with the auxiliary than copular *BE* form. These findings suggest that the rate of nonmainstream marking in narratives differs based on a child's dialect status in ways that are consistent with what has been documented in studies of conversational language samples.

However, by comparing the current results to a previous study of the grammatical structures produced in conversation, it was found that narratives were more likely to elicit past tense structures while conversations were more likely to elicit present tense structures.

INTRODUCTION

Through multiple studies, researchers have examined the grammar structures of nonmainstream English dialects such as African American English (AAE) and Southern White English (SWE) (Bailey & Maynor, 1989; Cleveland & Oetting, 2013; Dunlap, 1974; Fasold, 1981; Horton-Ikard & Weismer, 2005; Jackson & Roberts, 2001; Labov, 1969; Oetting & Garrity, 2006; Oetting & Pruitt, 2005; Roy, Oetting, & Moland, 2013; Wolfram, 1974). However, most of this research has focused on data collected from conversational tasks (Labov, 1969; Oetting & Garrity, 2006; Seymour, Bland-Stewart, & Green, 1998; Wolfram, 1974). It is important to study dialect usage in different discourse contexts because AAE and SWE speakers vary their use of their dialect based on the context in which the sample is gathered (Craig & Washington, 2002; Schick & Melzi, 2010; Thompson, Craig, & Washington, 2004; Washington, 1998; Washington & Craig, 1994). For this reason it is important to learn more about children's use of dialect in varied tasks rather than relying on findings from only studies of conversation. For this reason, the current study looks at a language-sampling context outside of conversational sampling.

Narratives were chosen as the medium for the current study because it has been found that the narrative abilities of children in elementary school are a good indicator of their overall language level (Bliss, Covington, & McCabe, 1999; Justice, Bowles, Pence, & Gosse, 2010; Pankratz, Plante, Vance, & Insalaco, 2007). However, most research on the narrative ability of nonmainstream American English speakers has centered solely on the structure and style of narratives. The current study examines verb structures instead because they are important to the analysis of narrative microstructure and they have not been studied as intensively as other areas of narrative analysis.

The nonmainstream structures addressed in the current study included regular third person singular, auxiliary and copular *IS* and *ARE*, and regular past tense. Previous studies have found these structures to be commonly produced in conversational samples by child speakers of AAE and SWE (for regular third person singular see: Cleveland & Oetting, 2013; Horton-Ikard & Weismer, 2005; Oetting & Garrity, 2006; Oetting & McDonald, 2002; for auxiliary and copular *IS* and *ARE* see: Garrity & Oetting, 2010; Horton-Ikard & Weismer, 2005; Oetting & Garrity, 2006; Oetting & McDonald, 2002; Roy et al., 2013; Washington & Craig, 1994; for regular past tense see: Horton-Ikard & Weismer, 2005; Oetting & Garrity, 2006; Oetting & McDonald, 2002; Pruitt & Oetting, 2009; Washington & Craig, 1994). Additionally, the previously mentioned studies have shown that all of these structures can be expressed using nonmainstream markings in AAE and SWE. It is for these reasons that these three structures were chosen for the current study.

I have long been interested in learning about dialects, especially AAE. This interest stems from a love of African American literature, which often features language and prose that employ AAE features to maintain authenticity and naturalness in the work. Through my work in the Language Development and Disorders Lab at LSU, I was introduced to SWE and I was amazed by the ways in which AAE and SWE are similar and at the same time, so very different. As a future clinician, it is very important to know what nonmainstream markings AAE and SWE speakers produce in narrative tasks so that a child's dialectal difference is not mistaken for a sign of language impairment or delay. Studies such as this one can serve as a first step in this imperative mission.

REVIEW OF LITERATURE

The focus of the current study is on nonmainstream grammar markings that are produced by AAE and SWE speakers during narratives. As background, three sets of literature are reviewed. First, I review studies that have shown nonmainstream grammar markings to vary by task. This literature is important to review to highlight the limitation of studies that have been conducted using conversational samples only. This literature also motivates a study on nonmainstream markings in narrative production because children's dialect usage has been found to differ depending on the task and/or context. Second, I review previous studies of narratives in AAE and also recent studies that examine narrative measures by child race or dialect. This section ends with a review of Terry, Mills, Bingham, Mansour, and Marencin (2013) to show that use of nonmainstream English can affect a child's rating on various measures of narrative ability. This literature motivates a study of nonmainstream English as it affects narrative production. Third, I review previous studies of child AAE and SWE because these are the two dialects for which I have data. The literature review ends with a review of previous AAE and SWE studies of the three target grammar structures. As will be shown, children produce each of these structures frequently in conversation and each can be expressed in AAE and SWE with nonmainstream forms.

Task Variability

Research has shown that the context in which language samples are obtained affects the language that is produced by young children (Washington, Craig, & Kushmaul, 1998). This means that children produce different language structures depending upon the context or task that they are presented. For this reason, it is important to review previous studies of children's nonmainstream markings across tasks. Little to no research has been done on SWE usage across

contexts but a few across-context studies of AAE exist. Washington et al. (1998) conducted one such study, which examined AAE usage in two contexts: free play and picture description. It was found that nonmainstream AAE usage was more frequent and diverse during picture description than in free play. Specifically, 11% of the child AAE speakers zero marked past tense in the free play context compared to 34% for the picture description task. This finding lends credence to the suggestion that the rate of nonmainstream English usage is different depending on the context in which a language sample is collected.

Thompson et al. (2004) conducted a study that was similar to Washington et al.'s (1998) in which samples were collected from child AAE speakers during three distinctive language contexts: picture description, oral reading, and writing. It was found that all of the participants produced nonmainstream forms during the picture description task and that the children produced more nonmainstream forms during picture description than in the writing context, again supporting the idea that children's usage of nonmainstream grammar structures varies according to context. The difference in the percentage of usage of nonmainstream structures between free play and other contexts can possibly be explained by the fact that the other contexts are more likely to elicit narrative structure and a narrative is more open-ended and provides more chances for a wider variety of grammatical structures (i.e., in a narrative you can talk about the past, etc.), whereas in free play children are more likely to focus their comments on objects present in the room and the here and now.

Simply employing conversational sampling, as has been done previously, has many shortcomings. Unpredictability is inherent in this form of language sampling because it can be influenced by situational factors, which can affect replication of the experimental findings (Wetherby & Rodriguez, 1992). Examining a child's narrative ability provides an alternative

context in which to gain useful information about that child's language skills. Additionally, it has been found that certain measures of conversational sampling do not differentiate between children with and without impairment. An example of this can be found in a study by Oetting, Newkirk, Hartfield, Wynn, Pruitt, and Garrity (2010) which found that the Index of Productive Syntax (IPSyn), a system that allows a clinician to index a child's grammatical development using a conversational language sample, was not sensitive enough to detect clinical differences (language impaired vs. non-impaired) in children over the age of 48 months. This is yet another reason why it is important to gain information about a child's language skills in other contexts; using conversational sampling alone does not always give a clear picture of a child's language abilities.

Narratives

Oral narratives can be defined as a form of discourse that communicates events that are either real or imagined (Schick & Melzi, 2010). To be able to produce an oral narrative, a child must have the linguistic and cognitive skills to organize multiple sentences as well as the sociocognitive skills required to recognize emotions and take the perspective of others (Peterson & McCabe, 1994; Schick & Melzi, 2010). As previously stated, children's narrative abilities while in elementary school are a good indicator of their overall language level (Bliss et al., 1999; Justice et al., 2010; Pankratz et al., 2007). Most research on the narrative production of AAE-speaking children has focused on the structure and style of the narrative by examining its micro and macrostructure (Bliss et al., 1999; Champion, 1998; Gardner-Neblett, 2012; Hyon & Sulzby, 1994). At the macrostructure level, the narratives that children produce are affected by "culturally specific social contexts" (Champion, 1998; Gutierrez-Clellen & Quinn, 1993).

Essentially, this means that the narratives children produce are affected by the culture in which they are reared.

In a study of 48 African American kindergartens, Hyon and Sulzby (1994) found that children often used a style of narrative production that can be referred to as topic associating, meaning that the narratives do not cohere around single topics but around a series of loosely and often unclearly related episodes. The findings of this study suggest that this topic associating style might be stigmatized as lacking structure and cohesion. The authors further stated that using Applebee's narrative levels might score narratives of this style at a lower level (as 'heaps' or an 'unfocused chain') than the more conventional topic-centered narratives. However, it is important to note that many other studies have found that African American children produce a range of narrative structures that are complex and sophisticated and that include topic-centered narratives (Champion, 1995; Champion, 1998; Hyon & Sulzby, 1994; Mainess, Champion, & McCabe, 2002; Price, Roberts, & Jackson, 2006). Although the current study did not focus on narrative style, this literature is included in this review to highlight the types of studies and central issues examined when African American children's narratives are explored at the macrostructure level.

Narrative Microstructure

Verb structures were chosen to be the focus of the current study because they are important to narrative analysis. More specifically, they are important measures of narrative microstructure. Microstructure refers to the "syntactic and semantic productivity, complexity, and accuracy needed to bring words and utterances together cohesively (Terry, et al., 2013, p. 292)." This includes measures of the number of words, number of utterances, clause density, number of different words, number of complex utterances, number of grammatically correct utterances, and

the adequacy of cohesive devices produced in the narrative. Because speakers of AAE and SWE sometime zero mark grammar structures, it is possible for a clinician to misinterpret information from narrative microstructure measures, such as the number of grammatically correct utterances and the number of complex utterances in these cases. Consider the narrative microstructure measure of type token ratio (TTR). TTR is defined as a measure of lexical diversity that is calculated by creating a ratio based on the total number of different words versus the total number of words in the sample (Curenton & Lucas, 2007). If a narrative were assessed using this measure, it is possible the TTR would be lower for a speaker of AAE or SWE than a speaker of Standard Mainstream American English because in both AAE and SWE, function words can be omitted (e. g. “he _ walking”).

Potential effects of nonmainstream marking on children’s narrative microstructure scores are also evident when one considers findings by Pankratz, Planto, and Insalaco (2007). In this study, the authors examined children’s microstructure scores on the Renfrew Bus Story – North American Edition (RBS-NA). This narrative tool is a norm-referenced screener in which a story is read to a child and the child is asked to retell the story to the examiner. This tool is used to assess sentence length, the amount of complex syntax produced, the amount of information from the original story that the child uses to retell the story, and the independence with which the child completed the task. To examine this narrative screener, Pankratz et al. compared non-European American (non-EA) racial/ethnic minority groups (including Hispanic, AA, and other) to European American (EA) preschoolers and found that the non-EA group had Sentence Length scores that were significantly lower than the EA group. However, this sample consisted mostly of children from Hispanic backgrounds and there were not enough AA participants to determine whether this pattern held true when comparing the AA participants to the EA participants.

In another study by van Kleeck, Lange, and Schwarz (2011), 172 kindergarteners (86 AA and 86 EA) completed the RBS-NA and it was found that there were systematic effects of race on the children's RBS-NA Information score, with AA kindergarteners scoring lower than their EA peers. This finding indicates that clinicians should be cautious when using the RBS-NA to determine the presence or absence of language impairment in AA children. A limitation of this study is that it only looked at the participants' race and not the effect of their dialect on these findings. However, given AA children's use of AAE and the RBS-NA's focus on narrative microstructure, it is reasonable to hypothesize that the children's use of AAE played a role in the AA children's lower RBS-NA scores.

For the purpose of the current study it is important to know what types of nonmainstream structures are produced when AAE- and SWE-speaking children complete narratives. Few studies have examined spoken nonmainstream marking in children's narratives. However, a study by Terry et al. (2013) has begun to bridge this gap in the literature. This study examined the narrative abilities of 146 typically developing AA pre-K students using a story retell task. The analysis included an evaluation of microstructure and macrostructure elements. The researchers found that, in general, oral narrative performance at the micro and macro level was not correlated with the children's spoken nonmainstream English usage. However, the study found that the children's nonmainstream marking was moderately and negatively correlated with their High Point Analysis scores at the end of pre-K, with higher scores being associated with stronger language achievement and less frequent use of nonmainstream English. The researchers suggest that this finding may indicate that spoken nonmainstream English use may be related to narrative ability. However, further research is needed to test the replication of this finding and to

extend this work to children who speak other nonmainstream dialects of English, such as SWE. The current study was designed to address this need.

AAE and SWE

A dialect is defined as any variety of language that is shared by a group of speakers (Wolfram, 1991). Although all dialects are equivalently complex, they are widely considered to fall on a continuum of standardness. Nonstandard dialects include linguistic structures that are socially stigmatized. Both AAE and SWE can be considered examples of nonstandard (or nonmainstream) dialects (Oetting, 2004). Both AAE and SWE are characterized by a wide variety of phonological, grammatical, and lexical features. These dialects share many features with other dialects, including standard Mainstream American English, but most research focuses on the differences between AAE, SWE, and other dialects rather than focusing on the similarities (Van Hofwegen & Wolfram, 2010; Wyatt, 1995).

Dialect Similarities

Although most dialect studies have focused on differences between AAE and SWE, some studies have identified a few similarities (Cleveland & Oetting, 2013; Oetting & Garrity, 2006; Oetting & McDonald, 2002; Roy et al., 2013). One important similarity between these two dialects is that they share an inventory of nonmainstream grammar structures. To this point, Oetting and McDonald (2002) found a total of 31 of 35 nonmainstream grammar structures to be present in conversational samples that were gathered from AAE and SWE child speakers. Additionally, a great deal of overlap exists within the nonmainstream grammatical structures that AAE- and SWE- speaking children produce at high frequencies. For example, Oetting and McDonald (2002) found that of the 10 nonmainstream structures that were produced most often for each dialect (AAE and SWE), 7 of these 10 structures overlapped between the two dialects.

These findings show that the dialects of AAE and SWE are closely related and therefore, certainly comparable. For the purpose of the current study and from these findings, I may predict children's nonmainstream marking to be similar in AAE and SWE during narratives.

Dialect Differences

AAE and SWE present some differences as well. The biggest difference between child speakers of AAE and their SWE-speaking peers is the frequency at which nonmainstream grammar structures are produced in speech. Numerous studies that have examined conversational data have shown that AAE child speakers produce higher rates of nonmainstream forms than their SWE-speaking peers (Cleveland & Oetting, 2013; Oetting & Garrity, 2006; Roy et al., 2013). This finding lends credibility to my hypotheses in this current study because I am exploring the rates at which these two dialects mark structures and hypothesizing that AAE speakers will produce higher rates of nonmainstream markings than comparable SWE speakers. Another difference between these two dialects focuses on the function that certain grammar structures play within the dialects. A good example of this would be the use of the '*had* + verb structure' (e.g., "I was on my way to school and I had slipped and fell"). This nonmainstream verb structure is used in both AAE and SWE to denote past perfect tense. But this structure also can be used to denote the preterite or simple past tense in AAE (Rickford & Rafal, 1996; Ross, Oetting, & Stapleton, 2004). This structure in AAE is often produced in narratives, and usually during the complicating action clause of narratives (Rickford & Rafal, 1996). The use of this structure has also been found to increase with age and narrative skill in child speakers of AAE (Ross, et al., 2004). These findings show that different English dialects can have the same grammatical structures in their repertoire but use them in ways that are unique to the grammar

system of each dialect. For the purpose of the current study and from these findings, I may predict nonmainstream marking use to be different in AAE and SWE during narratives.

Regular Third, BE, and Regular Past in AAE and SWE

The three grammatical structures examined in the current study were regular third person singular, auxiliary and copular *IS* and *ARE*, and regular past tense. These structures were chosen because numerous studies have found that nonmainstream marking of these structures is present and prevalent in the speech of AAE and SWE child speakers (Cleveland & Oetting, 2013; Horton-Ikard & Weismer, 2005; Oetting & Garrity, 2006; Oetting & McDonald, 2002; Roy et al., 2013; Washington & Craig, 1994). Additionally, these structures are common in narrative production and have been found to be more prevalent in picture description contexts than in free play, oral reading, or writing contexts (Thompson et al., 2004; Washington et al., 1998). The picture description tasks in the Thompson et al. (2004) and Washington et al. (1998) studies are very close in methods to the procedure that was used for eliciting the narrative samples in the current study.

Regular Third Person Singular

The first grammatical structure that was examined in this study is known as regular third person singular. In both AAE and SWE, regular third person singular can be marked in three ways: mainstream overt (e.g. ‘he walks’), nonmainstream overt (e.g. ‘you walks’), and nonmainstream zero (e.g. ‘he walk’). Of these three marking options, many studies have found that this structure can be zero marked or omitted in nonstandard dialects such as AAE or SWE (Cleveland & Oetting, 2013; Fasold, 1981; Schneider, 1983). In Labov and Harris (1986), it was found that AAE-speaking adults zero marked regular third person singular more than 50% of the time, with the majority of the group zero marking this structure in over 90% of their attempts.

Cukor-Avila (2001) compiled data from thirteen previous studies and determined that zero marking of regular third person singular was present in Early AAE and SWE (spoken between 1900 and 1945) but from 1945 onward, zero marking of this structure remained in AAE but became recessive in SWE; essentially asserting that zero marking of third person singular is infrequent and possibly non-existent in contemporary adult versions of SWE. These studies suggest that zero marking of regular third person singular is more prevalent in the speech of AAE-speaking adults than that of SWE-speaking adults.

However, it would be a stretch to assume that child speakers of AAE and SWE follow these same patterns based solely on the adult dialect research. Fortunately, a few child studies have been conducted. For example, Oetting and Garrity (2006) examined data from 93 participants, aged 4 to 6 years, and found that the children's average rate of zero marking for third person singular varied by dialect, with AAE speakers zero marking the structure 88% of the time compared to 17% for SWE speakers. This finding has been replicated in two other studies which also found that AAE-speaking children produced higher rates of zero marking of third person singular than their SWE-speaking counterparts (Cleveland & Oetting, 2013; Oetting & McDonald, 2002). This is important because it shows how AAE child speakers differ from their SWE-speaking peers in the usage of this common nonmainstream grammar structure.

AAE- and SWE-speaking children can also sometimes produce a nonmainstream overt form of regular third person singular (i.e., "I talks to a friend"). In these cases, overt marking of regular third person singular can include first, second, or third person plural subjects. Nonmainstream overt marking has been found in the speech of AAE- and SWE-speaking adults in various studies (Green, 2002; Labov & Harris, 1986) and in the speech of AAE- and SWE-speaking children (Cleveland & Oetting, 2013). The Cleveland and Oetting study examined data

from 57 children. Of the 1,159 third person -s contexts present in the language samples, nonmainstream overt marking was produced only fourteen times. These fourteen occurrences were produced by two AAE speakers and seven SWE speakers. Although infrequent, nonmainstream overt marking was considered dialect appropriate in AAE and SWE in the current study.

Auxiliary and Copular *IS* and *ARE*

Another grammatical structure that was examined in the current study was the auxiliary and copula BE forms of *IS* and *ARE*. Just as with the third person singular structure, mainstream overt marking of BE is not always required for speakers of AAE or SWE (Roy et al., 2013; Wolfram, 1974). As with regular third person singular marking, AAE and SWE speakers can produce nonmainstream zero forms and nonmainstream overt forms of this structure. In general, research of adult AAE speakers has found that rates of zero marking of BE are higher in auxiliary contexts than in copular contexts (Rickford, Ball, Blake, Jackson, & Martin, 1991). One study of adult speakers of SWE has found this same pattern of higher rates of zero marking of BE in auxiliary contexts when compared to copular contexts (Hazen, 2001).

It is important to note that zero marking of BE has been found to be more frequent than any other nonmainstream grammatical structure within child AAE and child SWE (Horton-Ikard & Weismer, 2005; Oetting & Pruitt, 2005; Washington & Craig, 1994). Numerous studies have been conducted that examined the BE production of child speakers of AAE (Garrity & Oetting, 2010; Horton-Ikard & Weismer, 2005; Jackson & Roberts, 2001; Oetting & Pruitt, 2005; Washington & Craig, 1994); however, few studies have been conducted on BE production in child speakers of SWE. As an example, Roy et al. (2013) compared BE production of AAE and SWE in child speakers and found that higher rates of zero marking were observed in the AAE

speakers when compared to the SWE speakers (46% vs. 7%). This study also found that, as with the adult studies, zero marking was more common in auxiliary contexts than in copular contexts. Findings from this study and others indicate that AAE child speakers zero mark the BE form at a higher rate than their SWE speaking peers.

In AAE and SWE, the person and number of the *BE* form may also differ from its subject; this is called subject-verb disagreement with *BE* (Oetting & McDonald, 2001). This phenomenon can be seen with copular and auxiliary *IS* in utterances such as “they is walking” and “I’s a girl.” In these examples, copular and auxiliary *IS* is essentially used in place of other *BE* forms such as *ARE* and *AM*. *IS* for *ARE* has been found in various studies in the adult dialect literature (Craig & Grogger, 2012; Fasold, 1981). Additionally, studies of the morphology of AAE and SWE child speakers have found this form to be present as well (Garrity & Oetting, 2010; Jackson & Roberts, 2001; Oetting & Pruitt, 2005; Roy et al., 2013). A study by Oetting and Pruitt (2005) found *IS* for *ARE* to be present at a rate of 8% in rural 4- and 6-year-old speakers of AAE. In contrast, *ARE* for *IS* (e.g. “he are walking”) has not been found in any of the studies that have been reviewed. Based on this body of literature, it can be concluded that *IS* for *ARE* but not *ARE* for *IS* is dialect-appropriate in AAE and SWE. As such, instances of *IS* for *ARE* were categorized as nonmainstream overt in the current study.

Regular Past Tense

Finally, regular past tense was the third grammatical structure examined in the current study. As with the other two grammatical structures, AAE and SWE allow nonmainstream zero forms and nonmainstream overt forms of this structure. A few studies have looked at zero marking of regular past tense by adult and child speakers of AAE. Craig and Grogger (2012) found that of 50 AAE speakers between the ages of twenty and thirty, 27% of the speakers zero

marked past tense. Jackson and Roberts (2001) studied 85 African American preschoolers and found that 43% of the three-year-old and 48% of the four-year-old AAE speakers zero marked past tense. Finally, Seymour et al. (1998) and Pruitt and Oetting (2009) documented that AAE child speakers zero mark the regular past tense structure less than 20% of the time in spontaneous language samples. Together, these findings indicate that zero marking of past tense, at least in AAE, is not extremely frequent in conversational language samples.

Little to no adult research into the production of regular past tense in SWE has been published. Few studies have compared AAE child speakers to SWE child speakers in respect to this structure. For example, Oetting and Garrity (2006) found that child speakers of AAE zero marked regular past tense at a rate of 26% while SWE child speakers zero marked this structure at a rate of 8%. This study suggests that AAE child speakers zero mark regular past tense at a higher rate than child speakers of SWE.

Research has shown that there are two types of past tense nonmainstream overt forms produced in AAE and SWE. One type involves overregularized irregular forms while the other is an alternative past tense form used only in narratives. Both AAE and SWE speakers produce the former while the latter has been shown to be unique to AAE. Specifically, it has been found that child speakers of AAE and SWE use overregularization (i.e., “she dranked it all”) to overtly mark regular past tense (Oetting & McDonald, 2001; Pruitt & Oetting, 2009). Also and as mentioned previously, AAE-speaking children sometimes use *had* + *V-ed* to refer to simple past tense within narratives (Ross et al., 2004). However, none of the SWE speakers produced this form. For the current study, overregularized past tense forms and preterite *had* + verb forms were counted as nonmainstream overt marking.

The Current Study

This study aimed to determine if nonmainstream dialect type has an effect on the rate at which child AAE and SWE speakers produce nonmainstream marking for three grammatical structures when producing oral narratives. To determine if nonmainstream marking is influenced by the children's dialect, the following research questions were posed:

- (1) Do child speakers of AAE and SWE differ in their rates of nonmainstream marking of regular third person singular?
- (2) Do child speakers of AAE and SWE differ in their rates of nonmainstream marking of *IS* and *ARE*?
- (3) Do child speakers of AAE and SWE differ in their nonmainstream marking of regular past tense?

Based on the literature review, I hypothesized that nonmainstream marking of all three target structures would be more prevalent in the AAE child speakers than their comparable SWE-speaking peers. Based on the literature review, I also hypothesized that both dialect groups would produce less nonmainstream marking for copular contexts than auxiliary contexts.

METHODS

Experimental Design

The current study employed a group comparison design. The independent variable was dialect type, which was a between-subjects variable that consists of two levels, AAE and SWE. The dependent variables were the rates of nonmainstream marking for the three grammatical structures. Those structures were regular third person singular in the present tense, copula and auxiliary *IS* and *ARE*, and regular past tense.

Participants

Twenty typically developing African American and twenty typically developing White kindergarten students from four primary schools in Assumption Parish, LA served as participants. These participants came from an archival database created from a larger study that contained 151 participants. The two groups were matched on the basis of chronological age (+ or – 3 months) and maternal education (+ or – 2 years). As shown in Table 1 and as tested with a one-way ANOVA, the two dialect groups did not significantly differ in their ages or level of maternal education.

Table 1. Profile of Participants^a

	AAE speakers n = 20	SWE speakers n = 20
Mean Age in Months	65.8 (3.1)	66.2 (3.2)
Mean Level of Maternal Education	13.3 (2.6)	13.5 (2.5)

^a means reported first, with standard deviations presented in parentheses.

Participants were judged to speak a dialect that differed from Mainstream American English if they produced one or more nonmainstream responses on Part I of *The Diagnostic Evaluation of Language Variation- Screening Test (DELV-ST*; Seymour, Roeper, & de Villiers, 2003). Part I of this screener allows the examiner to calculate the percentages of a speaker's

responses that differ from MAE. The children's mean percentage of nonmainstream responses on the DELV screener are included in Table 2. As shown in this table, the two dialect groups differed in their percent of nonmainstream responses on the DELV-ST, $F(1, 38) = 30.30, p < .001$, eta squared = .44. This finding is consistent with numerous studies that have found that AAE speakers produce more nonmainstream grammar structures than their SWE-speaking counterparts (Cleveland & Oetting, 2013; Oetting & Garrity, 2006; Roy et al., 2013).

Table 2. Percent of Nonmainstream Responses on DELV-ST by Dialect^a

	AAE speakers n = 20	SWE speakers n = 20
DELV Screener Ratings	.80 (.16)	.43 (.25)

^a means reported first, with standard deviations presented in parentheses.

Dialect type (AAE vs. SWE) was assigned using a listener judgment task. This method has been used successfully by others in the field (Oetting & McDonald, 2002; Oetting & Richardson, 2012; Pruitt & Oetting 2009). To complete the listener judgment task, one-minute excerpts were extracted from each child's conversational language sample. These excerpts were quasi-randomly chosen because care was taken to ensure that the excerpts contained little input from the examiner and no references to the child's race. Three graduate students independently listened to the excerpts and completed a dialect-rating sheet for each participant. The listeners were blinded to the race, age, sex, and language ability of each participant. Each listener was asked to make a judgment about the type and rate of the participant's dialect using two seven-point Likert scales, one for AAE and one for SWE upon which a rating of "1" equaled no use of nonmainstream English features and a rating of "7" equaled heavy use. A child was classified as either an AAE or SWE speaker if all three raters independently classified and agreed on the child's dialect type. As shown in Table 3, the two dialect groups differed in the listeners' dialect density ratings, $F(1, 38) = 21.13, p < .001$, eta squared = .36. As stated previously, this finding

was expected because AAE speakers have been shown to produce more nonmainstream structures than their SWE-speaking counterparts.

Table 3. Dialect Density Values by Dialect^a

	AAE Speakers n = 20	SWE Speakers n = 20
Mean Dialect Density based on Listener Judgment (1=no use, 7=heavy use)	4.0 (1.3)	2.4 (0.7)

^a means reported first, with standard deviations presented in parentheses.

Standardized Measures

A variety of standardized measures were used to determine eligibility for participation in this study. The nonverbal intelligence of each participant was judged to be typical using the *Primary Test Of Nonverbal Intelligence (PTONI*; Ehrler & McGhee, 2008). The *PTONI* is a standardized non-verbal intelligence test used to assess children, aged 3-0 to 9-11. It has been normed on a culturally diverse population from various states in the U.S. and consists of a picture-pointing task in which the participant is asked to point out the picture that is different from the others. For the purpose of this study, a standard score of 100 (with a standard deviation of 15) is considered within normal limits on the *PTONI*.

The *Peabody Picture Vocabulary Test – 4th edition (PPVT-4*; Dunn & Dunn, 2007) was given to the participants to judge their vocabulary abilities. The *PPVT-4* is a standardized assessment that provides a measure of receptive vocabulary in both children and adults and it has been normed on a culturally diverse population for the United States. The examiner presents a target word orally and the participant is asked to choose the matching illustration from a set of four pictures. For the purpose of this study, a standard score of 100 (with a standard deviation of 15) is considered within normal limits on the *PPVT-4*.

The syntax subtest of the *Diagnostic Evaluation of Language Variation – Norm Referenced (DELV-NR)* (Seymour, Roeper, & de Villiers, 2005) was given to the participants to measure their ability to comprehend *wh*-questions, produce articles, and comprehend passive sentences. In the *wh*-question section the participant is shown a set of pictures and instructed to listen to a short story about the illustrations. Then, he or she is asked a variety of *wh*-questions about the presented material. The participant's ability to comprehend passive sentences is evaluated by showing the participant three pictures and asking him or her to point to the picture that matches the passive sentence that is read by the examiner. Finally, the participant's ability to produce articles is assessed by asking the participant to answer a question using an appropriate article (i. e. "a/an" or "the") based on the context that they are offered. The scores from all three subtests are combined to create a standard syntax score. This assessment has been normed on a culturally diverse population for the United States. For the purpose of this study, a standard score of 10 (with a standard deviation of 3) is considered within normal limits on the *DELV-NR*.

The *Sounds in Words* subtest of the *Goldman-Fristoe Test of Articulation -2nd edition (GFTA-2)* (Goldman & Fristoe, 2000) was administered to the participants to determine their articulation ability. This standardized assessment measures the participant's ability to produce target consonant sounds in various positions in words both imitatively and spontaneously. The assessment can be used on any person, aged 2 to 21 years old and it has been normed on a culturally diverse population for the United States. For the purpose of this study, a standard score of 100 (with a standard deviation of 15) is considered within normal limits on the *GFTA-2*.

The children's test scores are presented in Table 4. Although all of the children selected for the current study scored within or above -1 standard deviation of the normative mean on the four tests, the two dialect groups differed significantly in their mean standard scores; for the

PTONI, $F(1, 38) = 7.579$, $p = .009$, eta squared = .17; the *PPVT-4* $F(1, 38) = 11.031$, $p = .002$, eta squared = .23; the *DELV-NR* $F(1, 38) = 5.063$, $p = .030$, eta squared = .11; and the *GFTA-2* $F(1, 38) = 8.392$, $p = .006$, eta squared = .18.

Table 4. Test Performance Scores by Dialect^a

	AAE speakers n = 20	SWE speakers n = 20
PTONI	97.1 (10.3)	109.2 (16.6)
PPVT-4	96.4 (8.8)	105.9 (9.3)
DELV-NR	9.1 (1.4)	10.1 (1.5)
GFTA-2	106.8 (3.9)	110.2 (3.6)

^a means reported first, with standard deviations presented in parentheses.

Language Samples: Elicitation and Coding

Graduate level research assistants from LSU's Language Development and Disorders Lab collected language samples from each participant. The samples consisted of play-based interactions and narratives using pictures. The samples took place in a quiet classroom at each participant's school. The narrative samples for this study were gathered by asking the participant to tell a story about three to four Apricot picture cards (Arwood, 1985). The cards depicted children at a grocery store, children playing basketball, children fishing, and children in a fight. These cards were used because they depict the whole context of an event and provide more opportunities to elicit a narrative than pictures of a simple object or action. In these event-based pictures, each character's actions depict either a causal or sequential action that moves the story forward. To begin, the examiner told a story about an initial picture to demonstrate to the child what was expected (in regards to narrative length, complexity, etc.). Then, the participant was asked to tell the examiner a story about a different picture. The participant was then given one to two more pictures and asked to produce a story about those as well. Finally, the participant was asked to tell a story about the picture that the examiner initially used to tell a story. It is

important to note that this final narrative is the only story that had been modeled. In some cases, children produced a narrative that was similar to the one that the examiner initially told but in other cases, children created a narrative that was completely different.

The language samples, which included the narratives, were audio recorded during the session and later transcribed. The participants' utterances were then morphologically coded using Systematic Analysis of Language Transcripts (SALT) software (Miller & Iglesias, 2004) and the guidelines of the Language Sample Transcription and Coding Manual (Oetting et al., 2013).

In addition, 36 nonmainstream structures of AAE and SWE were coded to indicate nonmainstream features as they occurred in the language samples. According to the coding system, overt marking of regular third person singular was denoted with an “/3s.” Overt marking of regular past tense was denoted with an “/ed.” Finally, overt marking of copular *IS* and *ARE* was denoted with “[concop] or [unconcop]” depending on whether the copular could be contracted, and overt marking of auxiliary *IS* and *ARE* was denoted with “[conaux] or [unconaux]” depending on whether the auxiliary verb could be contracted. Zero marking of regular third person singular and regular past tense was denoted with an asterisk before the code (i.e., “/*3s,” “/*ed,”). Zero marking of *IS* was denoted with an “*is” before the applicable code (i.e., “*is [unconcop],” etc.). Zero marking of *ARE* was denoted with an “*are” before the applicable code (i.e., “*are [unconaux], etc.). Finally, a flag (coded “[flg]”) was added if the child overtly produced a morpheme that did not match adult MAE, and a “[d]” was added if the structure was dialect appropriate for AAE or SWE.

Extracting and Analyzing the Narratives

I first used SALT to identify and store the narrative sections of each transcript. This was done by opening the language sample transcript for each participant and copying it into a blank

file, deleting everything besides the narrative, and saving the remaining text as a new document.

The average number of complete and intelligible utterances produced by the AAE group was 29.7 (SD = 9.7) while the average for the SWE group was 36.3 (SD = 25.2). The average number of narratives produced by the AAE group was 3.8 (SD = .41) while the average for the SWE group was 3.7 (.47). When tested with a one-way ANOVA, the two dialect groups did not differ significantly in their number of complete and intelligible utterances; $F(1,38) = 1.19, p = .28$, eta squared = .03 or their number of narratives; $F(1, 38) = .51, p = .48$, eta squared = 0.01.

Story Grammar levels were also assigned for each participant using guidelines provided by Westby (2012) and using Applebee's (1978) narrative analysis framework. Story Grammar is a widely used method for categorizing stories into various levels depending upon their complexity (Curenton & Lucas, 2007). The Story Grammar levels are as follows: descriptive sequence, action sequence, reactive sequence, abbreviated episode, incomplete episode, complete episode, multiple episodes, and complex episode. To determine each participant's Story Grammar level, I assigned each narrative that the participant produced a Story Grammar level. I then found the narrative that was scored at the highest level and equated that to be the participant's Story Grammar level. Individual scores per participant are presented in appendix G.

The majority of the AAE narratives were action sequences, which are described as being composed of events and actions that are chained temporally. Reactive sequences were a close second. This level of narrative is described as showing a cause and effect relationship between the actions that are presented in a narrative. There were three narratives that scored above this level; two abbreviated episodes and one complete episode. The majority of the SWE narratives were reactive sequences. There were four narratives that scored below this level and seven that scored higher. In fact, there were even three complete narratives and one narrative that was

composed of multiple episodes. The mean narrative level for the AAE group was 2.80 (SD = 1.0) while the mean for the SWE group was 3.55 (SD = 1.67). When tested with a one-way ANOVA, it was found that the two dialect groups did not differ significantly in their mean narrative level; $F(1,38) = 2.96, p = .09$, eta squared = 0.07.

Finally, I used the ‘Analyze: Utterance Code Tables’ feature within SALT to locate the tokens of the target structures (regular third person, copular and auxiliary *is* and *are*, and regular past tense) within the narrative sections. Cover sheets were used along with the printed transcripts to record the frequency with which the structures were used within each narrative (see Appendices). To determine the rate at which each child used nonmainstream marking in their narratives, the number of nonmainstream overt and nonmainstream zero marking of the targeted structures was divided by the total number of opportunities the child had to produce the structures in the narrative. In Tables 5, 6, and 7 each type of mainstream and nonmainstream type of marking for each grammatical structure is listed and illustrated with an example.

Table 5. Types of Markings and Examples for Regular Third Person Singular

Regular Third Person Singular	
Mainstream overt	He talks to a friend
Nonmainstream overt	I talks to a friend
Nonmainstream zero	He talk to a friend
Other	Maybe mommy can fits

Table 6. Types of Markings and Examples for *IS* and *ARE*

Copular <i>IS</i>	
Mainstream overt	This is real?
Nonmainstream overt	They is walking.
Nonmainstream zero	This real?
Other	He's park.
Auxiliary <i>IS</i>	
Mainstream overt	He is going.
Nonmainstream overt	He am going.
Nonmainstream zero	He going.
Other	What is you making?
Copular <i>ARE</i>	
Mainstream overt	Where are they at?
Nonmainstream overt	NONE
Nonmainstream zero	Where they at?
Other	What are the gas tank?
Auxiliary <i>ARE</i>	
Mainstream overt	They are burning.
Nonmainstream overt	NONE
Nonmainstream zero	They burning.
Other	There are fishing.

Table 7. Types of Markings and Examples for Regular Past Tense

Regular Past Tense	
Mainstream overt	He walked down the street
Nonmainstream overt	I was on my way to school and I had slipped and fell
Nonmainstream overt	She dranked it all
Nonmainstream zero	She dance yesterday
Other	He jumpeded over it

Reliability

Transcription of the language samples was checked as part of the original study by having a second set of transcribers independently transcribe 5% of a randomly selected set of utterances from each participant's sample. Then, inter-rater agreement was examined for utterance boundaries, and the transcribers' transcription of words, functional morphemes, and the grammar and dialect codes. For each sample, inter-rater agreement was at or above 85%.

Then, coding of the participants' marking of the three grammar structures were examined by having a second examiner independently code the narratives for eight (20%) of the children. The inter-rater agreement between the two coders was 94% (range = 83% - 100%).

RESULTS

Rate of Nonmainstream marking of regular third person singular by dialect

There were 24 tokens of regular third person singular marking (see Table 8). Of these 24 tokens, speakers of AAE produced 9 while speakers of SWE produced 15. The AAE group zero marked all of their contexts while the SWE group produced overt and zero marking.

Table 8. Marking of Regular Third Person Singular by Dialect

	AAE n = 6	SWE n = 5
Frequency of Mainstream Overt Markings	0	12
Frequency of Nonmainstream Overt Markings	0	0
Frequency of Nonmainstream Zero Markings	9	3
Mean percentage of NMAE markings (with SD)	100 (00)	12 (16)

The AAE speakers' mean percentage of nonmainstream marking was 100 (SD = 0) and the SWE speakers' mean percentage of nonmainstream marking was 12 (SD = 16). When tested with a one way ANOVA, the effect for dialect was significant; $F(1,9) = 181.44, p < .001$, eta squared = .95.

Rate of Nonmainstream marking of *IS* and *ARE* by dialect

There were 148 tokens of *IS* marking (see Table 9). Four of these tokens were classified as “other” and were not included in the analysis. The tokens that were considered ‘other’ consisted of errors of commission. For example, one production that was classified as ‘other’ was “all they did is stayed in their houses all day long.” Of the 144 tokens that were analyzed, speakers of

AAE produced 84 while speakers of SWE produced 64. Both groups produced both mainstream overt and nonmainstream zero marking for *IS*, however, the AAE group used nonmainstream zero marking more often while the SWE group was more likely to use the mainstream overt marking. The AAE speakers' mean percentage of nonmainstream marking was 45 (SD = 40) and the SWE speakers' mean percentage was 8 (SD = 16). When tested with a one-way ANOVA, the effect for dialect was significant; $F(1,28) = 10.50, p = .003$, eta squared = 0.27.

Table 9. Marking of *IS* and *ARE* by Dialect

	AAE		SWE	
	<i>IS</i> n = 16	<i>ARE</i> n = 11	<i>IS</i> n = 15	<i>ARE</i> n = 10
Frequency of Mainstream Overt Markings	38	10	53	14
Frequency of Nonmainstream Overt Markings	2	n/a	3	n/a
Frequency of Nonmainstream Zero Markings	42	25	6	7
Mean percentage of NMAE markings (with SD)	45 (40)	71 (44)	8 (16)	35 (47)

There were 57 tokens of *ARE* marking. One of these tokens was classified as “other” and was not included in the analysis. The token that was considered ‘other’ presented an ambiguous gloss and was as follows: “and the little boy saw them again and then he said why are y’all keep fighting.” In this utterance, ‘are’ could have been functioning as ‘do’ so it was excluded. Of the 56 tokens that were analyzed, speakers of AAE produced 35 while speakers of SWE produced 21. Both groups produced both mainstream overt and nonmainstream zero marking for *ARE*, however, the AAE group used the nonmainstream zero marking more often while the SWE group was more likely to use the mainstream overt marking. The AAE speakers' mean

percentage of nonmainstream *ARE* marking was 71 (SD = .44) and the SWE speakers' mean percentage was 35 (SD = .47). However, when tested with a one-way ANOVA, the effect for dialect was not significant; $F(1,20) = 3.39, p = .08$, eta squared = 0.14.

Because previous studies have shown a difference between copular and auxiliary *BE* nonmainstream marking, I also broke the data down further to compare *IS* and *ARE* copular data to *IS* and *ARE* auxiliary data. As shown in Table 10, AAE-speaking children were more likely to use nonmainstream marking in the auxiliary context than in the copular context; $t(10) = -2.38, p = .039$.

Table 10. Marking of Copular and Auxiliary *BE* by Dialect

	AAE		SWE	
	C n = 14	A n = 15	C n = 11	A n = 12
Frequency of Mainstream Overt Markings	31	17	30	37
Frequency of Nonmainstream Overt Markings	1	1	3	0
Frequency of Nonmainstream Zero Markings	10	57	5	8
Mean percentage of NMAE markings (with SD)	31 (43)	69 (41)	13 (19)	11 (18)

Conversely, there was not a significant difference in the mean of nonmainstream marking for copular context and auxiliary context for SWE speakers; $t(5) = -.235, p = .824$. However, it is important to note that because some participants did not produce any *IS* and/or *ARE* tokens, the t-test included data from only 11 of the 20 AAE-speaking participants and 6 of the 20 SWE-speaking participants.

Rate of Nonmainstream marking of regular past tense by dialect

There were 276 tokens of regular past tense marking (see Table 11). Three of these tokens were classified as “other” and were not included in the analysis. For example, one production that was classified as ‘other’ was “the boy jump/ed/ed off the thing.” Of the 273 tokens that were analyzed, speakers of AAE produced 108 while speakers of SWE produced 165. Both groups used mainstream overt marking as well as nonmainstream zero marking.

Table 11. Marking of Regular Past Tense by Dialect

	AAE n = 20	SWE n = 19
Frequency of Mainstream Overt Markings	60	131
Frequency of Nonmainstream Overt Markings (<i>had</i> + V-<i>ed</i>)	11	0
Frequency of Nonmainstream Overt Markings (overregularizations)	6	17
Frequency of Nonmainstream Zero Markings	31	17
Mean percentage of NMAE markings (with SD)	40 (27)	21 (27)

Both groups also produced nonmainstream overregularization but only the AAE group used the *had* + V-*ed* structure. The AAE speakers’ mean percentage of nonmainstream marking was 40 (SD = .27) and the SWE speakers’ mean percentage of NM marking was 21 (SD = .27). When tested with a one-way ANOVA, the effect for dialect was significant; $F(1,37) = 4.67, p = .037$, eta squared = .11.

DISCUSSION

The purpose of this study was to determine if dialect status has an effect on the rate at which kindergarteners produce nonmainstream English markings for regular third person, *IS* and *ARE*, and regular past tense when producing oral narratives. I hypothesized that nonmainstream marking of all three target structures would be more prevalent in the AAE child narratives than in the SWE child narratives. This hypothesis was confirmed based on the current findings.

The first research question focused on regular third person singular. The results showed that the two groups differed significantly, with the AAE group having a higher rate of nonmainstream marking than the SWE group. The AAE group used only nonmainstream zero marking while the SWE group used a combination of mainstream overt and nonmainstream zero marking. For third person singular, no nonmainstream overt markings were produced by either dialect group.

The second research question focused on *IS* and *ARE*. The results showed that the two dialect groups differed significantly for *IS* but not *ARE*, with the AAE group having a higher rate of nonmainstream marking for *IS* than the SWE group. The AAE group was also more likely to use nonmainstream marking within an auxiliary context than within a copular context and this finding was statistically significant. For the SWE group, their use of nonmainstream marking within copular and auxiliary contexts was not statistically different.

The third research question focused on regular past tense. The results showed that the two groups differed significantly, with the AAE group having a higher rate of nonmainstream marking than the SWE group. The AAE group was more likely to use nonmainstream zero marking while the SWE group was more likely to use mainstream overt marking. The findings for nonmainstream overt marking are quite interesting. The AAE group produced 11 tokens of

the *had* +V-*ed* form while the SWE group did not produce any. However, both groups used overregularization to overtly mark regular past tense.

Comparison of Findings to the Literature

A number of findings are consistent with the previous literature. Numerous studies have found that child speakers of AAE zero mark regular third person singular at a rate that is higher than that of child speakers of SWE (Cleveland & Oetting, 2013; Oetting & Garrity, 2006; Oetting & McDonald, 2002). The current findings are consistent with findings from these previous studies. Although past studies have found that AAE and SWE speakers can sometimes produce a nonmainstream overt form of regular third person singular, the current study did not find any tokens of this form (Cleveland & Oetting, 2013; Green, 2002; Labov & Harris, 1986).

In regards to the current findings on *IS* and *ARE*, some similarities and differences can be found when compared to past literature. The current study found higher rates of nonmainstream zero marking for *IS* in the child AAE speakers when compared to the SWE speakers, which is consistent with the findings of Roy et al. (2013). A dialect effect was not found for *ARE*, and this finding is inconsistent with previous studies. Numerous studies have also found that zero marking of *IS* and *ARE* is higher in auxiliary contexts than in copular contexts in AAE and SWE (Hazen, 2001; Rickford et al., 1991, Roy et. al., 2013). The current findings for AAE but not SWE are consistent with these findings.

Additionally, previous literature has found that subject-verb disagreement with *BE* is dialect-appropriate in AAE and SWE (Craig & Grogger, 2012; Fasold, 1981; Garrity & Oetting, 2010; Jackson & Roberts, 2001; Oetting & Pruitt, 2005; Roy et al., 2013). Findings from the current study are consistent with the previous literature because the AAE speakers produced two instances of subject-verb disagreement with *BE* and the SWE speakers produced three.

In regards to the current findings on regular past tense, some similarities can be found with the previous literature. Oetting and Garrity (2006) found that AAE child speakers zero marked regular past tense at a rate of 26% while the SWE child speakers zero marked at a rate of 8%. This finding is similar to that of the current study that found that the AAE child speakers zero marked 29% of the time and the SWE child speakers zero marked 10% of the time. Additionally, the current study's finding that AAE child speakers used the *had* + *V-ed* structure to mark regular past tense in narratives while SWE child speakers did not is consistent with the findings of Rickford and Rafal (1996) and Ross, Oetting, and Stapleton (2004). The current study's finding that overregularization is produced by both AAE and SWE child speakers to express past tense is also consistent with previous findings (Oetting & McDonald, 2001; Pruitt & Oetting, 2009).

The impetus for the current study was an interest in narratives because based on the literature I expected the children's use of nonmainstream English to vary by the context in which the sample was gathered (Craig & Washington, 2002; Schick & Melzi, 2010; Thompson, Craig, & Washington, 2004; Washington, 1998; Washington & Craig, 1994). Surprisingly, the results did not vary but instead what I found was a high degree of consistency between what has been documented for AAE and SWE in conversation and what I observed in narratives. Upon reflection, perhaps different research questions would have better illuminated differences between AAE- and SWE-speaking children's conversations and narratives. For example, I could have compared the children's conversational data to their narrative data. Although I was unable to do this because the children's conversational data was not available, as a post hoc analysis, I compared the current results to results from a previous study by Oetting and Garrity (2006) that used conversational data. Table 12 compares the sums and proportions of regular third person

singular, *IS* and *ARE*, and regular past tense of Oetting and Garrity's (2006) study to the sums and proportions of the current study.

Table 12. Frequency and Proportion of Grammatical Structures by Task

		Regular Third Person Singular	<i>IS</i>	<i>ARE</i>	Regular Past Tense	Total
Conversation (Oetting & Garrity, 2006)	Sum of each structure	1110	3141	656	759	5, 666
	Proportion of each structure from total	20%	55%	12%	13%	100%
Narrative (Current Study)	Sum of each structure	24	144	56	273	497
	Proportion of each structure from total	5%	29%	11%	55%	100%

For each study, the proportions for each target structure were calculated out of the total number of regular third person singular, *IS* and *ARE*, and regular past tense tokens identified in the samples (and the proportions sum to 100% of the tokens identified). As can be seen in the table, the conversational data led to high numbers and proportions of regular third person singular and *IS* tokens whereas the narrative data led to high numbers and proportions of past tense tokens. This finding is clinically interesting because it shows that using a narrative context is more likely than conversation to invoke the production of past tense and perhaps other past tense structure such as past progressive, past perfect, and past habitual. If replicated, this finding shows differences between conversations and narratives and highlights the importance of including narratives within an assessment to elicit past tense grammatical structures from children.

Limitations of the Current Study

There are a number of limitations to the present study. One such limitation is that the number of utterances that were analyzed was low for all participants. Having a greater number of utterances for each participant would have made the findings of the current study stronger. Additionally, the two dialect groups were not matched on their performance on the standardized testing that was administered before gaining inclusion into the current study. Matching the two groups on their performance on these assessments would ensure that it is less likely that the findings of the current study were affected by the cognitive, language, or speech abilities of the participants.

Additionally, Apricot pictures were used to elicit narratives in the current study, however, there are a number of alternative ways to elicit narratives including story retell, telling a story in the hopes that a child will provide one in turn, or through standardized assessments. It is possible that using a different elicitation technique could have provided more narratives or more complex narratives from the children. For example, an AAE speaker from the current study was found to produce a narrative of a higher level during the conversational play section of the language sample than during the narrative task. The following is the highest-level narrative that the child produced when prompted with the Apricot pictures:

The boys played basketball. Then the basketball had went in the road. And when a man was driving a car the car was about to flip over. The boy was running. Then hit the car. And then the man got flipped. And the car flipped over.

This narrative is an action sequence. This narrative level involves actions in chronological order with no causal relationship. This story is a collection of action attempts and a true episode structure is not present. In comparison, the following is a personal narrative that the same child produced when asked a question in conversation:

One time when my mama bring me to Baton Rouge where her sister lives, it had a x down there. Her was going in there so [she] had to find her a new phone. And then her had raned out of gas because the people didn't give her enough money to get some gas. Then my mama her old phone had called the tow truck to come tow her truck to the gas station so her could get some gas.

This narrative is a complete episode. There is a setting (Baton Rouge), characters (the child's mother, etc.), an initiating event (the child's mother needed to find a new phone), a problem (her car ran out of gas), the steps to solve the problem (call a tow truck), and a conclusion (the child's mother called the tow truck to tow her to the gas station). All of these events are casually related. As can be seen in this example, the child produced a more complex narrative during conversational language sampling than when prompted with the Apricot pictures. For this reason, future studies may benefit from gathering narratives using a variety of elicitation techniques.

Future Directions

Given the limitations of the current study, future endeavors examining children's use of nonmainstream marking in narratives should employ a variety of narrative elicitation techniques to ensure that a wide range of narratives is gathered from each child. Also, future studies should examine whether children's rate of nonmainstream marking correlates to their Story Grammar levels. In all future endeavors, participants should have the same number of utterances to ensure that findings are not skewed due to an unequal number of tokens. Participants in future studies should also be closely matched in performance on preliminary standardized testing to ensure that outside factors do not affect the study's findings. Further studies may also expand this project to include more participants of various dialects and examine other aspects of narrative ability such as narrative macrostructure and microstructure.

Conclusions

In conclusion, the current study found that child speakers of AAE produced higher rates of nonmainstream marking than their SWE-speaking peers for each of the three grammar structures studied. This difference was statistically significant for regular third person singular, *IS*, and regular past tense. In addition, the AAE-speaking children but not the SWE-speaking children, produced higher rates of nonmainstream marking in auxiliary contexts than copular contexts. Finally, through a post hoc analysis of the data and a comparison of the results to a previous study completed with conversational data, it was found that narrative data is more likely to elicit past tense contexts and conversational data is more likely to elicit present tense contexts.

From these findings, speech-language pathologists should expect differences between AAE- and SWE-speaking children's dialects in both conversation and narratives; however, they should also be aware that narratives generate more opportunities than conversation to elicit past tense grammatical structures. Given this, speech-language pathologists should include narratives within their language assessments of AAE- and SWE-speaking children to increase the range of grammatical structures they are able to elicit and evaluate.

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APPENDIX A: REGULAR THIRD PERSON SINGULAR CODING SHEET

Regular Third Person Singular

Alpha: _____

Number: _____

Pattern	Line Number	Total (Frequency)
/3s (mainstream overt) he walk/3s she jump/3s kiss/3s the dog		
/3s [flg] [d] (nonmainstream overt) I talk/3s [flg] [d] to a friend. the mommy and the daddy want/3s [flg] [d] a baby.		
/*3s (nonmainstream zero) he walk/*3s [d] she jump/*3s [d] punch/*3s [d] his momma		
/3s [flg] (other) maybe mommy can fit/3s [flg]		

APPENDIX B: COPULAR *IS* CODING SHEET

Copular *is*

Alpha: _____

Number: _____

Pattern	Line Number	Total (Frequency)
is [unconcop] is/'s [concop] (mainstream overt) this is [unconcop] real? the shark is [concop] dead		
is [unconcop] [flg] [d] is/'s [concop] [flg] [d] (nonmainstream overt) they is [unconcop] [flg] [d] happy. they/'s [concop] [flg] [d] sad.		
*is [unconcop] *is/*'s [concop] (nonmainstream zero) this *is [unconcop] real? the shark *is [concop] dead		
is [unconcop] [flg] is /'s [concop] [flg] (other) he/'s [concop] [flg] almost did. he/'s [concop] [flg] park/3s. she/'s [concop] [flg] did not go outside to play with my friend/s.		

APPENDIX C: AUXILARY IS CODING SHEET

Auxiliary is

Alpha: _____

Number: _____

Pattern	Line Number	Total (Frequency)
Is [unconaux] Is/'s [conaux] (mainstream overt) this is [unconaux] get/ing real boring. He is [conaux] gonna go up the ramp without the car.		
is [unconaux] [flg] [d] is/'s [conaux] [flg] [d] (nonmainstream overt) what is [unconaux] [flg] you making? Them two boy/s is [unconaux] [flg] [d] punch/ing each other. cause the mama and daddy/'s [conaux] [flg] [d] come/ing back in the house and they got a bunch of fish.		
*is [unconaux] *is/'s [conaux] (nonmainstream zero) this *is [unconaux] get/ing real boring. he *is [conaux] gonna go up the ramp without the car.		
is [unconaux] [flg] is/'s [conaux] [flg] (other) Im/'s [conaux] [flg] [d] walking. He am [conaux] [flg] [d] reading.		

APPENDIX D: AUXILARY *ARE* CODING SHEET

Alpha: _____ Auxiliary *are* (preceding -ing)
 Number: _____

Pattern	Line Number	Total (Frequency)
are [unconaux] are/'re [conaux] (mainstream overt) the pineapples are [unconaux] burning. they/'re [conaux] always having fun with me.		
*are [unconaux] *are/*'re [conaux] (nonmainstream zero) the pineapples *are [unconaux] burning. they/*'re [conaux] always having fun with me.		
are [flg] [unconaux] [flg] are/'re [conaux] [flg] (other) there are [unconaux] [flg] fishing. once upon a time two boys are [unconaux] [flg] fighting. you're are [conaux] [flg] gonna walk.		

APPENDIX E: COPULAR *ARE* CODING SHEET

Copular *are*

Alpha: _____

Number: _____

Pattern	Line Number	Total (Frequency)
are [unconcop] are/'re [concop] (mainstream overt) where are [unconcop] they at? you/'re [concop] welcome.		
*are [unconcop] *are/*'re [concop] (nonmainstream zero) where *are [unconcop] they at? you/*'re [concop] welcome.		
are [flg] are [flg]/'re [flg] (other) what are [unconcop] [flg] the gas tank? why are [unconcop] [flg] y'all keep fighting? there are [unconcop] [flg] happy. you're [concop] [flg] know what to talk about.		

APPENDIX F: REGULAR PAST TENSE CODING SHEET

Regular Past Tense

Alpha: _____

Number: _____

Pattern	Line Number	Total (Frequency)
/ed (mainstream overt) he walk/ed she jump/ed kiss/ed the dog		
Had +/- (nonmainstream overt) had dance/ed had jump/ed the mommy and the daddy had want/ed a baby.		
OVR (Irregular) [flg] [d] (nonmainstream overt) She drink/ed [flg] [d] it all He fall/ed [flg] [d] down She bleed/ed [flg] [d] all over the floor		
/*ed (nonmainstream zero) he walk/*ed [d] yesterday. she jump/*ed [d] last week. punch/*ed [d] his momma Tuesday.		
DBL (Regular) (other) he jump/ed/ed over it the boy dance/ed/ed yesterday		

APPENDIX G: PARTICIPANTS' DATA

Number & Alpha Code (race)	# of complete and intelligible utterances	# of narratives produced	Highest story level according to Story Grammar levels
877 ADOMI (W)	84	3	reactive sequence
738 ADUGA (W)	25	4	abbreviated episode
702 SCHIL (W)	21	3	abbreviated episode
875 PPHIL (W)	21	4	complete episode
844 HWYSI (W)	26	4	reactive sequence
819 RMCKL (W)	30	4	action sequence
843 RWATS (W)	30	4	reactive sequence
809 AMATT (W)	119	4	complete episode
828 BSONS (W)	31	4	reactive sequence
816 EDAIG (W)	24	4	multiple episodes
712 BWILL (W)	21	3	complete episode
826 JTOUP (W)	44	4	reactive sequence
783 AREUL (W)	35	3	reactive sequence
728 KLEBR (W)	40	4	reactive sequence
874 KLEBL2 (W)	24	4	reactive sequence
872 RADAM (W)	19	3	descriptive sequence
779 HCOCO (W)	57	4	incomplete episode
705 KGUIL (W)	19	4	action sequence
817 CRIVE (W)	26	4	reactive sequence
747 SMARS (W)	14	3	descriptive sequence
864 DANDE (AA)	21	4	reactive sequence
801 JJUPI (AA)	52	4	reactive sequence
847 KLAND (AA)	36	4	abbreviated episode
851 ASIMO (AA)	25	4	reactive sequence
737 CDOMI (AA)	16	3	action sequence
852 KCOLE (AA)	32	4	action sequence
863 JWILL (AA)	46	4	reactive sequence
766 RADAM2 (AA)	24	3	action sequence
789 GRHOD (AA)	17	4	action sequence
727 KWILL (AA)	33	4	complete episode
756 LWILL (AA)	28	3	reactive sequence
861 JAUSB (AA)	22	4	action sequence
853 KBATE (AA)	31	4	reactive sequence
841 AHILL (AA)	25	4	action sequence
716 SSIMS (AA)	45	4	abbreviated episode
707 ASOTO (AA)	21	3	reactive sequence
717 TMOLL (AA)	31	4	action sequence
860 ARINE (AA)	38	4	action sequence
854 APREA (AA)	24	4	action sequence
837 JCLIN (AA)	27	4	reactive sequence

APPENDIX H: INSTITUTIONAL REVIEW BOARD APPROVAL DOCUMENT

Project Report and Continuation Application

(Complete and return to IRB, 131 David Boyd Hall.
Direct questions to IRB Chairman Robert Mathews 578-8692.)



Institutional Review Board
Dr. Robert Mathews, Chair
131 David Boyd Hall
Baton Rouge, LA 70803
P: 225.578.8692
F: 225.578.6983
irb@lsu.edu | lsu.edu/irb

IRB#: 2792 Your Current Approval Expires On: 7/15/2013

Review type: Expedited Risk Factor: Minimal

Date Sent: 5/2/2013

PI: Janna Oetting Dept: COMD Phone: (225) 578-3932

Student/Co-Investigator: see below

Project Title: Tense and Subject-verb Agreement in SAAE and SWE by Dialect Density and SLI Status

Number of Subjects Authorized: 500

Please read the entire application. Missing information will delay approval

I. PROJECT FUNDED BY: NIDCD LSU proposal #: 33813

II. PROJECT STATUS: Check the appropriate blank(s); and complete the following:

- ☒ 1. Active, subject enrollment continuing; # subjects enrolled: 449
☐ 2. Active, subject enrollment complete; # subjects enrolled: _____
☐ 3. Active, subject enrollment complete; work with subjects continues.
☐ 4. Active, work with subjects complete; data analysis in progress.
☐ 5. Project start postponed
☐ 6. Project complete; end date 1/1/
☐ 7. Project cancelled: no human subjects used.

III. PROTOCOL: (Check one).

- ☒ Protocol continues as previously approved
☐ Changes are requested*
• List (on separate sheet) any changes to approved protocol.

IV. UNEXPECTED PROBLEMS: (did anything occur that increased risks to participants):

- > State number of events since study inception: 1 since last report: 0
> If such events occurred, describe them and how they affect risks in your study, in an attached report.
> Have there been any previously unreported events? Y/N N?
(if YES, attach report describing event and any corrective action).

V. CONSENT FORM AND RISK/BENEFIT RATIO:

Does new knowledge or adverse events change the risk/benefit ratio? Y/N N;
Is a corresponding change in the consent form needed? Y/N N

VI. ATTACH A BRIEF, FACTUAL SUMMARY of project progress/results to show continued participation of subjects is justified; or to provide a final report on project findings.

VII. ATTACH CURRENT CONSENT FORM (only if subject enrollment is continuing); and check the appropriate blank:

- ☒ 1. Form is unchanged since last approved
☐ 2. Approval of revision requested herewith: (Identify changes)

Signature of Principal Investigator: Janna Oetting

Date: 5/15/13

IRB Action:	<input checked="" type="checkbox"/> Continuation approved; Approval Expires: <u>5/20/14</u>
	<input type="checkbox"/> Disapproved
	<input type="checkbox"/> File closed
Signed: <u>Robert Mathews</u>	Date: <u>5/21/13</u>

Form date: April 16, 2008

VITA

Andromeda Love was raised in Baton Rouge, Louisiana. She graduated from Louisiana State University and earned a Bachelor of Arts degree in English – Writing and Culture. A year later, she enrolled as a master’s student in Communication Disorders at the Louisiana State University. There, she worked as a research assistant which was funded by an NIH grant exploring the nonmainstream English use of Louisiana kindergartners. Andromeda began her thesis under Dr. Janna Oetting as partial fulfillment of the requirements for a Master of Arts degree. Upon graduating, Andromeda hopes to gain a clinical fellowship position as a speech-language pathologist in a school system or as a geriatric speech-language pathologist in a skilled nursing facility.